

File Names

12:00 Monday, March 21, 2005 1

File #	Original File Name
1	PAC2001_SMMT_WRL_PART_PCASP_20010813D20_V1.csv

Dataset Key Phrases

2

Data Exchange Standard Version	Principal Investigator Name--last first	Principal Investigator Affiliation	File Contents Description--short long	Sampling Interval As Reported in Main Table	Sampling Frequency Of Data in Main Table	Quality Control Level	Organization Acronym	Organization Name	Data Usage Acknowledgement	Study Or Network Acronym	Study Or Network Name
NARSTO 2002/05/28 (2.301)	Leaitch ; Richard	Air Quality Research Branch, Meteorological Service of Canada	PART_SIZE_DIST ; Particle Size Distibution using PCASP	5 minute	Variable frequency	1	ENVCAN	Environment Canada	Meteorological Service of Canada, Environment Canada, 4905 Dufferin St., Toronto, Ont. Canada M3H 5T4	PAC2001	Pacific 2001

Country Code	State Or Province Code	Principal Investigator Contact Information	Co-investigator Name--last first	Co-investigator Affiliation	Name And Affiliation Of Person Who Generated This File	Date Of Last Modification To Data In Main Table	Name And Version Of Software Used To Create This File	Companion File Name format And Version	Date This File Generated archive Version Number	Table Explanation Of Zero Or Negative Values	Table Explanation Of Reported Detection Limit Values
CA (CANADA)	BC	Richard Leaitch, 4905 Dufferin St., Toronto ON, CANADA, M3H 5T4 Richard.Leaitch@ec.gc.ca	None ; None	Air Quality Research Branch, Meteorological Service of Canada	Greg Skelton, SKELTON TECHICAL SERVICES INC	2004/02/27	MS Excel/ 2000	None ; 0	2004/04/06 ; 1	Zero values for particle count measurements represent actual values	None

Table Explanation Of Reported Uncertainty	Table User Note	Table User Note2	Table User Note3	Table User Note4	Table Name		Table Focus
					Table Name	Table Focus	
None	None	None			PART_SIZE_DIST	Surface--fixed	

Site Information

Site ID	Name	State Province code	Latitude: decimal degree	Longitude: decimal degree	Sampling height above ground (m)	Ground elevation above sea level (m)	Site land use	Site location setting	Measurement start date	Measurement end date	Co-incident measurements	Study site ID	Lat lon accuracy
PC01CABCSMMT	Sumas	BC	49.05166	-122.24666	-999.0	300.0	Forest	Rural	2001/08/13	2001/09/01			.

NARSTO Standard Flags

Flag: NARSTO	Description
H1	Historical data that have not been assessed or validated
	Historical data that have not been assessed or validated
	Historical data that have not been assessed or validated
M1	Missing value because no value is available
	Missing value because no value is available
	Missing value because no value is available
M2	Missing value because invalidated by data originator
	Missing value because invalidated by data originator
	Missing value because invalidated by data originator
V0	Valid value
	Valid value
	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
	Valid value but comprised wholly or partially of below detection limit data
	Valid value but comprised wholly or partially of below detection limit data
V2	Valid estimated value
	Valid estimated value
	Valid estimated value
V3	Valid interpolated value
	Valid interpolated value
	Valid interpolated value
V4	Valid value despite failing to meet some QC or statistical criteria
	Valid value despite failing to meet some QC or statistical criteria
	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
V6	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)

NARSTO Standard Flags

Flag: NARSTO	Description
V7	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
	Valid value but set equal to the detection limit (DL) because the measured value was below the DL

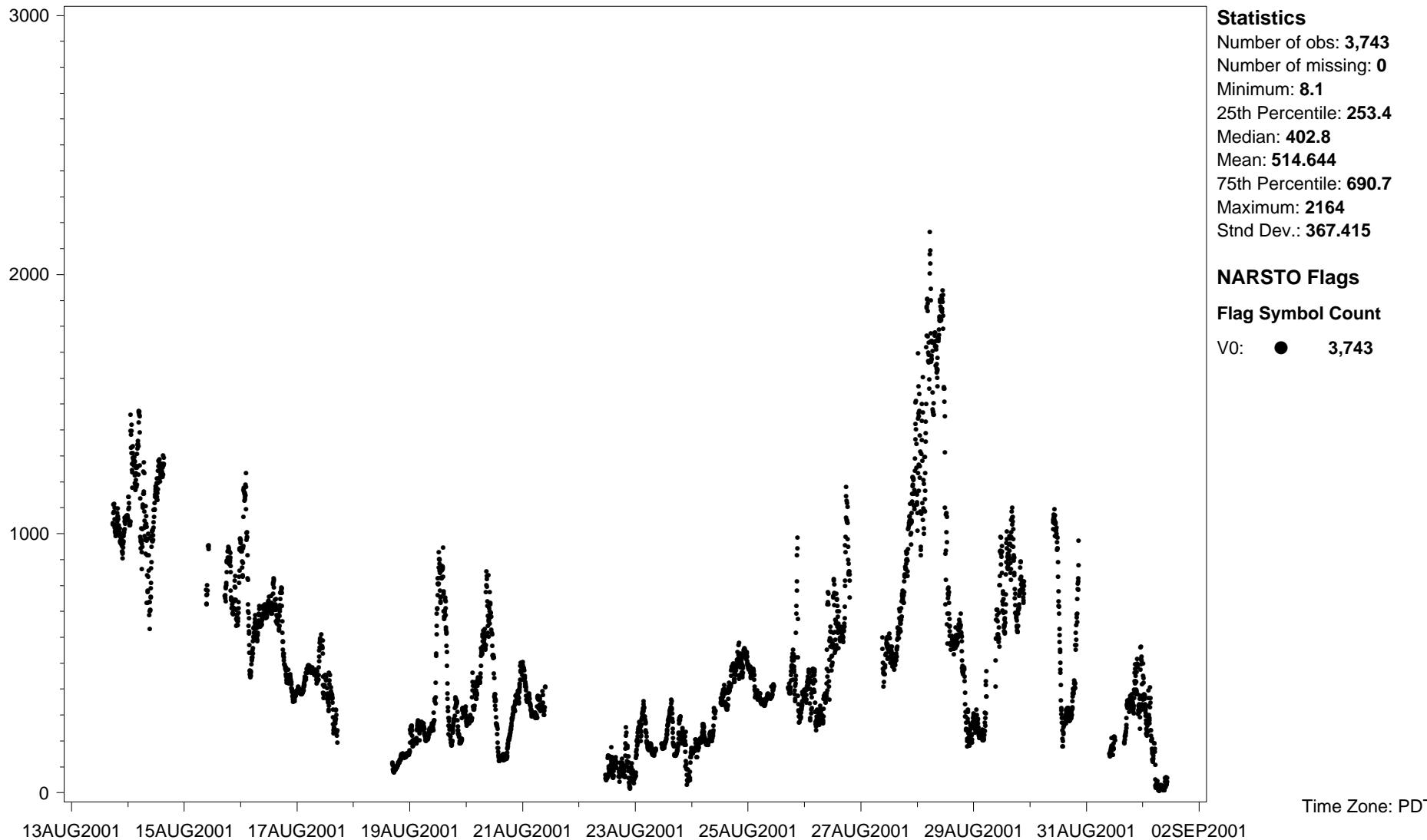
NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **Sum Channel 01-15** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Field sampling or measurement principle: **PCASP** Inlet type: **Open sampling line**
Sampling humidity or temperature control: **Temperature controlled** Instrument name and model number: **Particle Measuring System PCASP-100X**
Measurement principal investigator: **Richard Leitch** Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm3)

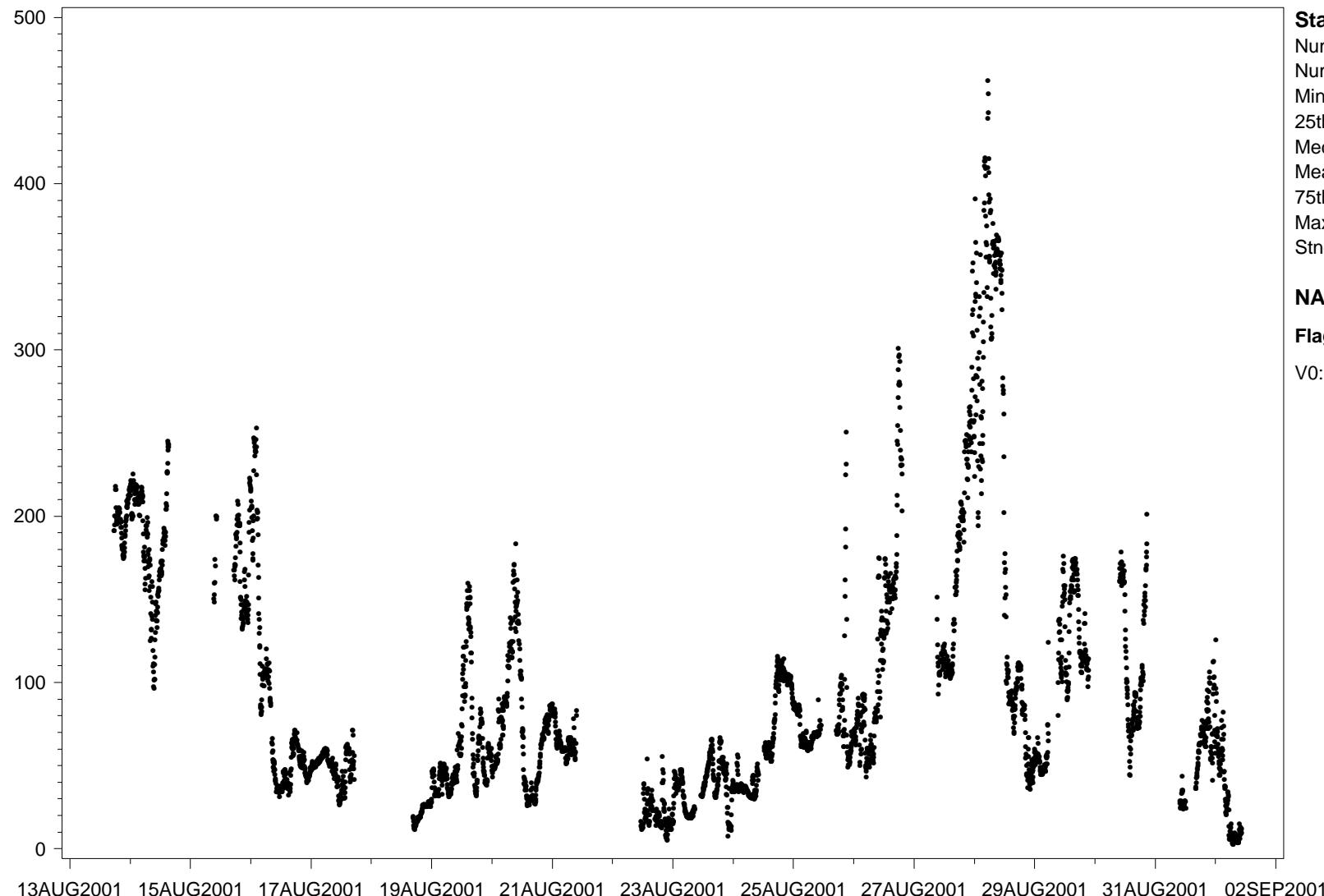


NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 01** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.15**
Particle diameter--upper bound (UM): **0.165** Particle diameter--median (UM): **0.1575** Field sampling or measurement principle: **PCASP**
Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm³)**Statistics**

Number of obs: **3,743**
Number of missing: **0**
Minimum: **2.8**
25th Percentile: **43.8**
Median: **66.7**
Mean: **94.238**
75th Percentile: **120.5**
Maximum: **461.7**
Stnd Dev.: **74.952**

NARSTO Flags

Flag Symbol Count
V0: ● **3,743**

Time Zone: PDT

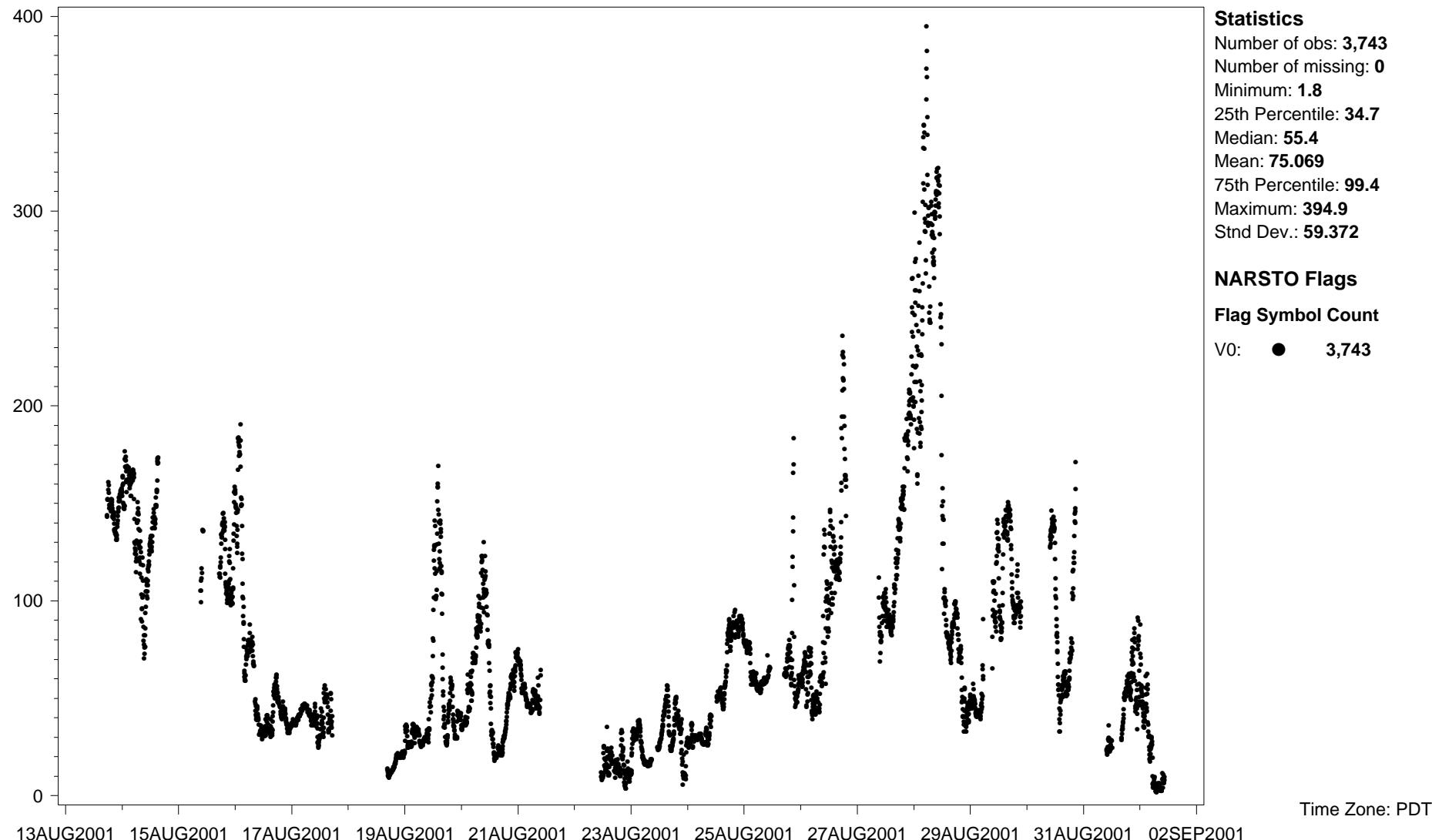
NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 02** Sampling interval: **5 minute**
 Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.165**
 Particle diameter--upper bound (UM): **0.18** Particle diameter--median (UM): **0.1725** Field sampling or measurement principle: **PCASP**
 Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
 Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
 Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm3)

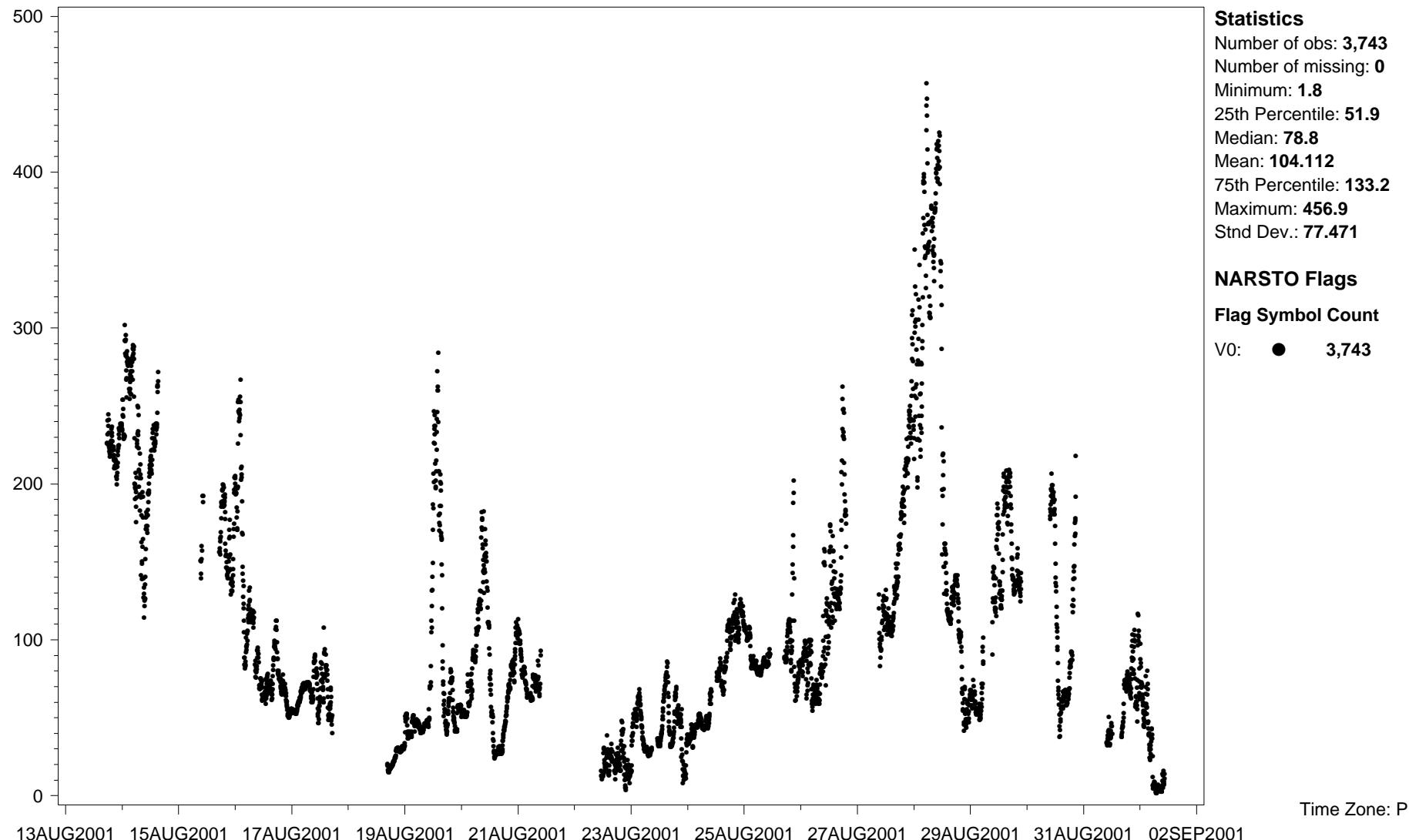


NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 03** Sampling interval: **5 minute**
 Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.18**
 Particle diameter--upper bound (UM): **0.205** Particle diameter--median (UM): **0.1925** Field sampling or measurement principle: **PCASP**
 Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
 Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
 Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

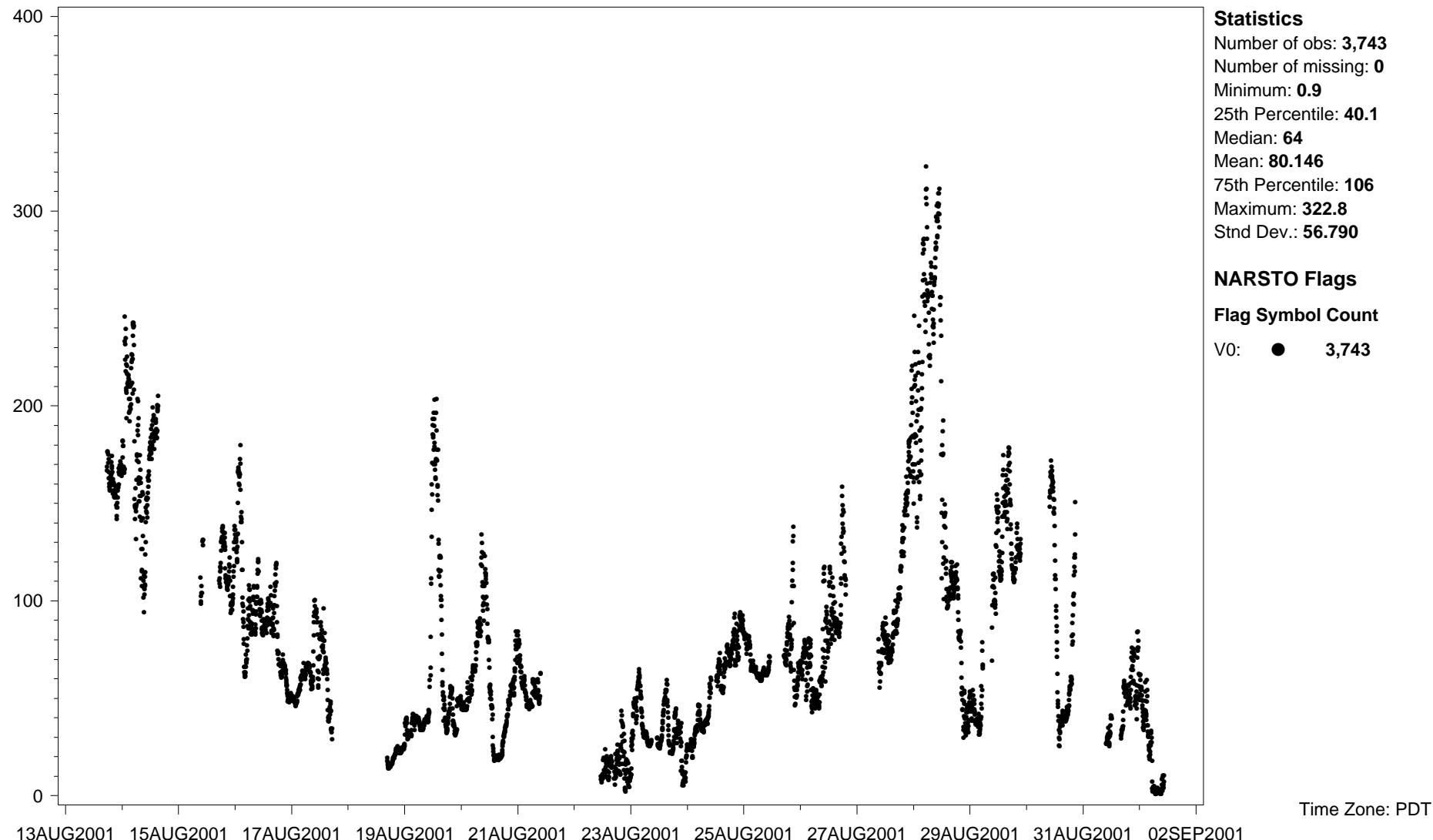
Particles: count (number/cm³)

NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 04** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.205**
Particle diameter--upper bound (UM): **0.23** Particle diameter--median (UM): **0.2175** Field sampling or measurement principle: **PCASP**
Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm³)

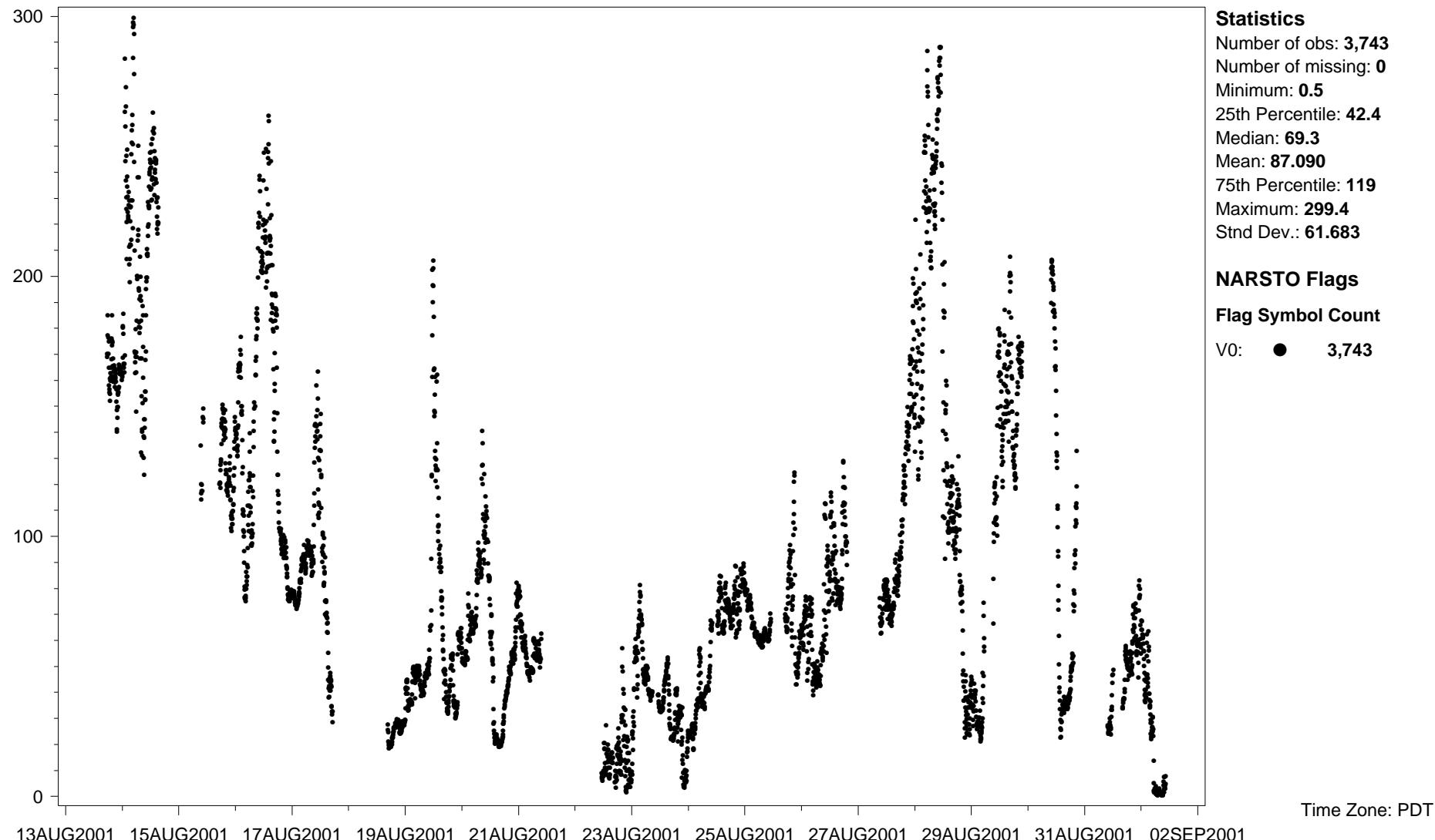
NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 05** Sampling interval: **5 minute**
 Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.23**
 Particle diameter--upper bound (UM): **0.29** Particle diameter--median (UM): **0.26** Field sampling or measurement principle: **PCASP**
 Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
 Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
 Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm3)



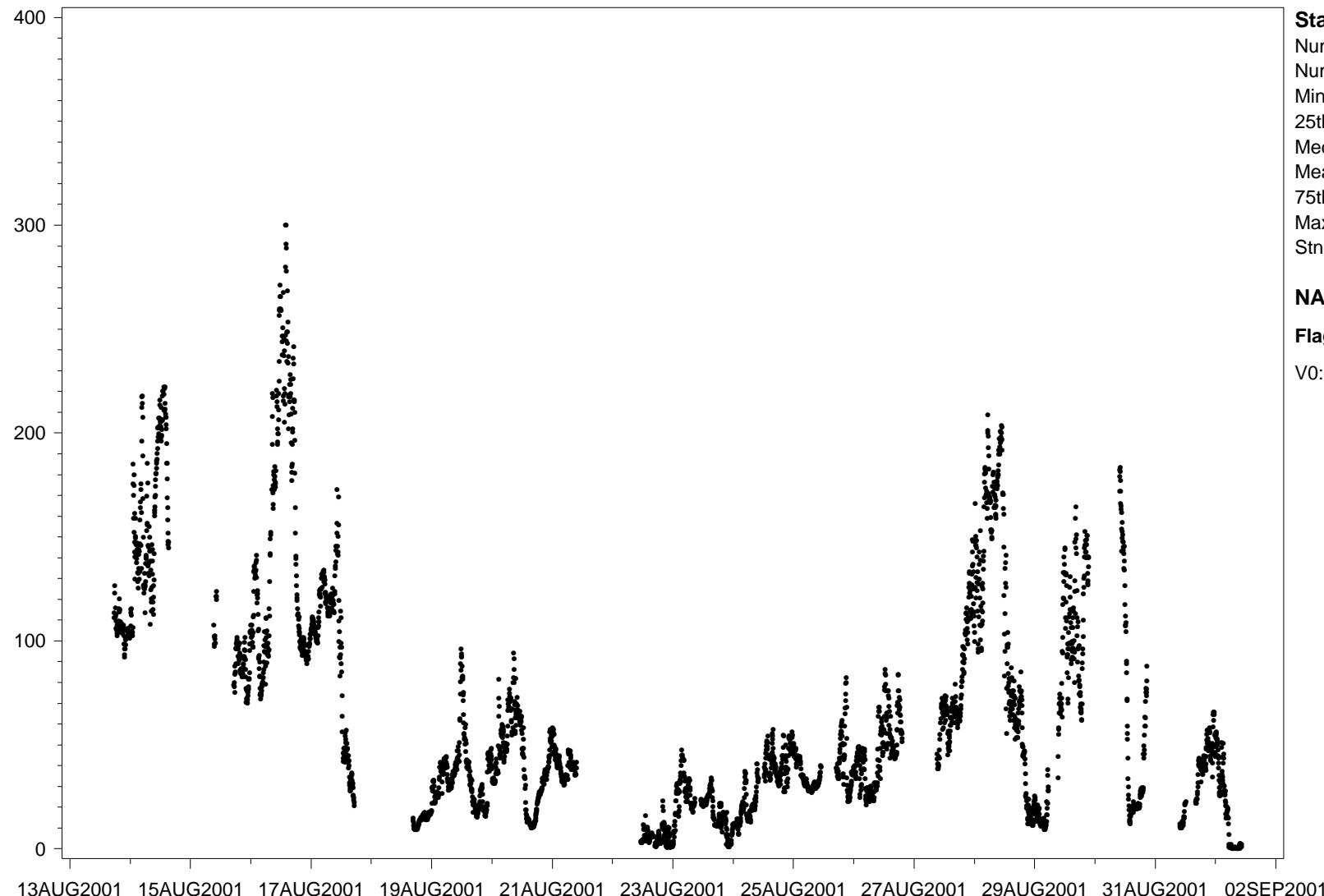
NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 06** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.29**
Particle diameter--upper bound (UM): **0.425** Particle diameter--median (UM): **0.3575** Field sampling or measurement principle: **PCASP**
Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm3)

**Statistics**

Number of obs: **3,743**
Number of missing: **0**
Minimum: **0.1**
25th Percentile: **25.2**
Median: **44.5**
Mean: **64.493**
75th Percentile: **96.9**
Maximum: **300.2**
Stnd Dev.: **54.564**

NARSTO Flags

Flag Symbol Count
V0: ● **3,743**

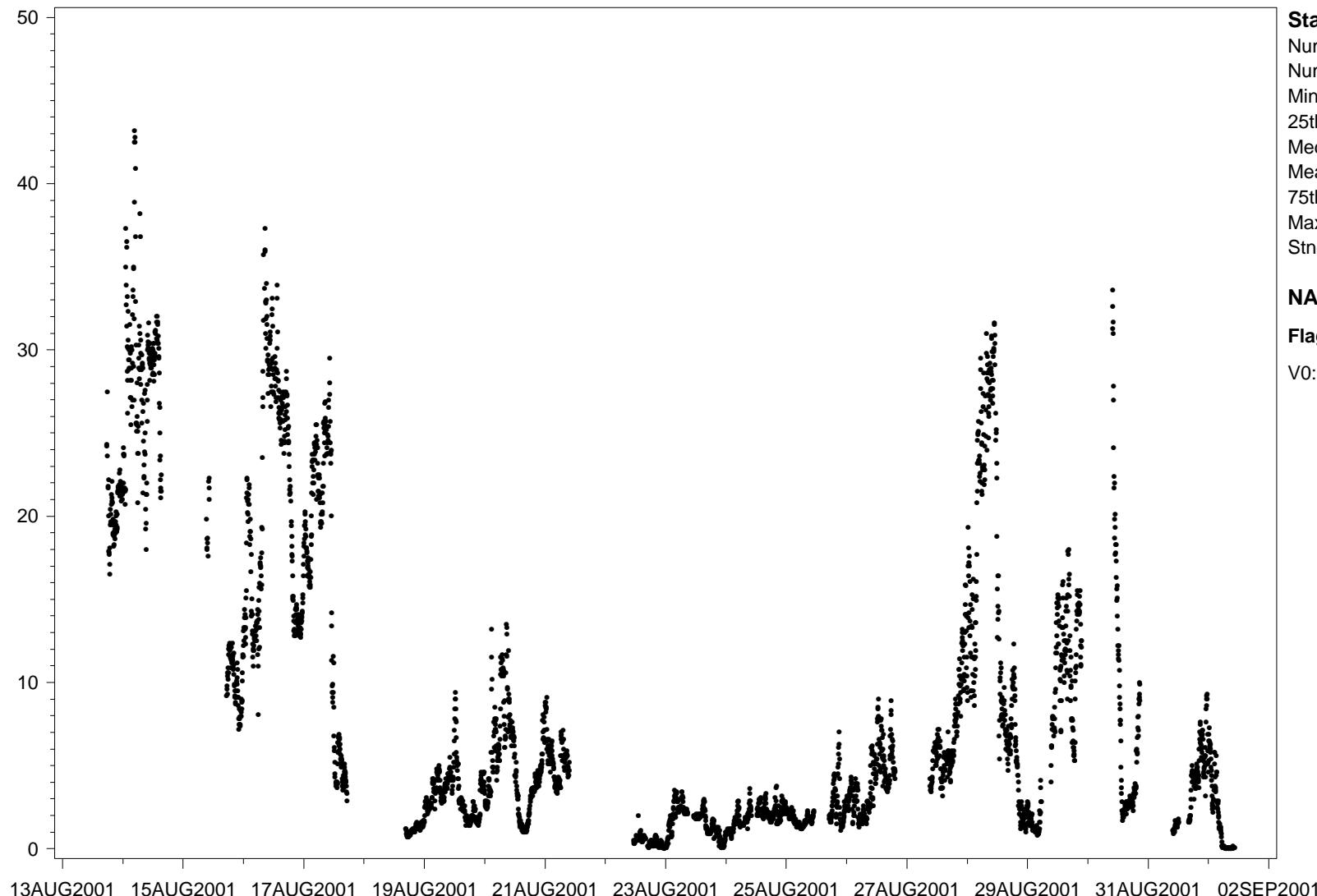
Time Zone: PDT

NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 07** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.425**
Particle diameter--upper bound (UM): **0.55** Particle diameter--median (UM): **0.4875** Field sampling or measurement principle: **PCASP**
Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm³)**Statistics**

Number of obs: **3,743**
Number of missing: **0**
Minimum: **0**
25th Percentile: **2**
Median: **4.3**
Mean: **8.261**
75th Percentile: **11.8**
Maximum: **43.2**
Stnd Dev.: **8.899**

NARSTO Flags

Flag Symbol Count
V0: ● 3,743

Time Zone: PDT

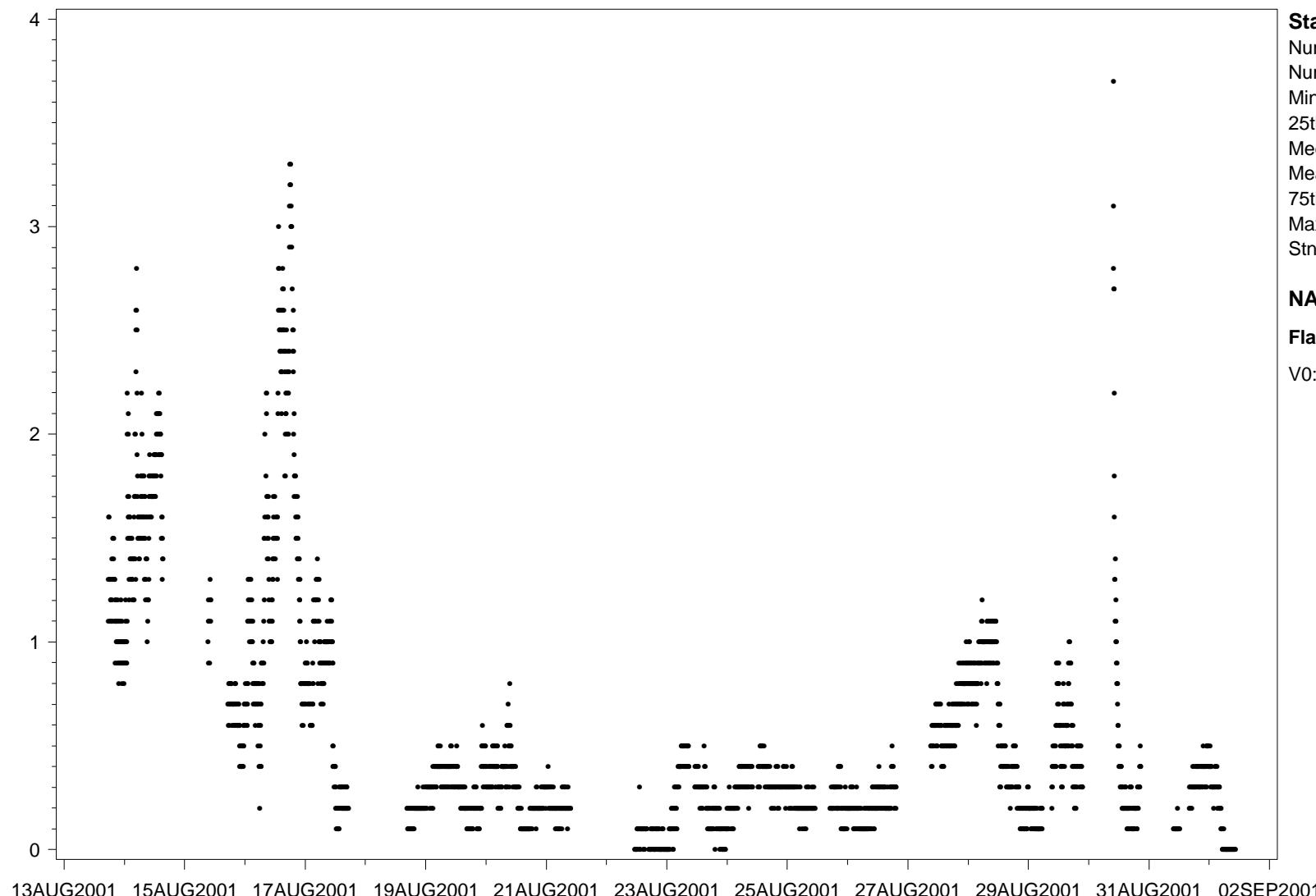
NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 08** Sampling interval: **5 minute**
 Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.55**
 Particle diameter--upper bound (UM): **0.6** Particle diameter--median (UM): **0.575** Field sampling or measurement principle: **PCASP**
 Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
 Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
 Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm3)

**Statistics**

Number of obs: **3,743**
 Number of missing: **0**
 Minimum: **0**
 25th Percentile: **0.2**
 Median: **0.3**
 Mean: **0.515**
 75th Percentile: **0.7**
 Maximum: **3.7**
 Stnd Dev.: **0.523**

NARSTO Flags

Flag Symbol Count
 V0: ● 3,743

Time Zone: PDT

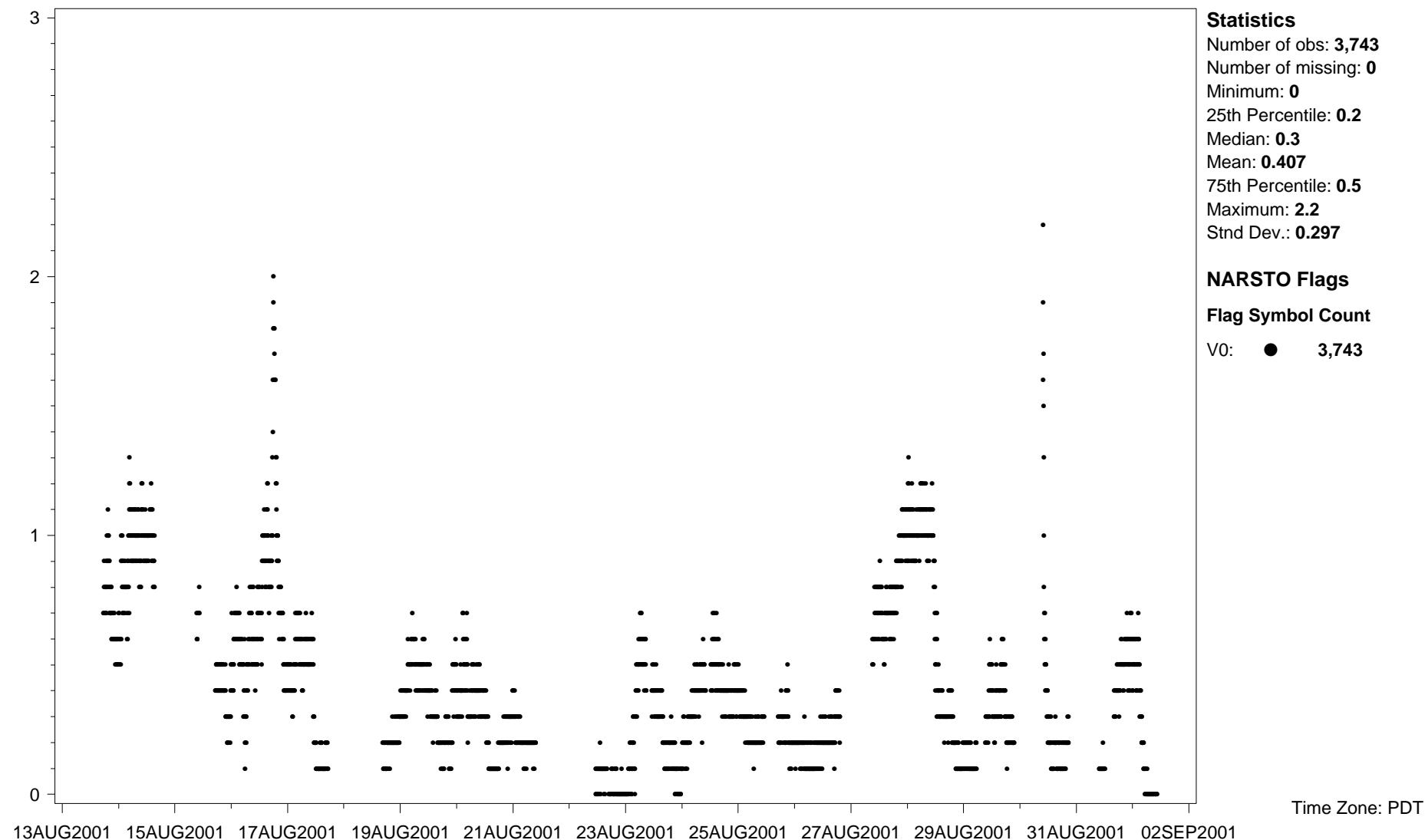
NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 09** Sampling interval: **5 minute**
 Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.6**
 Particle diameter--upper bound (UM): **0.725** Particle diameter--median (UM): **0.6625** Field sampling or measurement principle: **PCASP**
 Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
 Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
 Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm3)

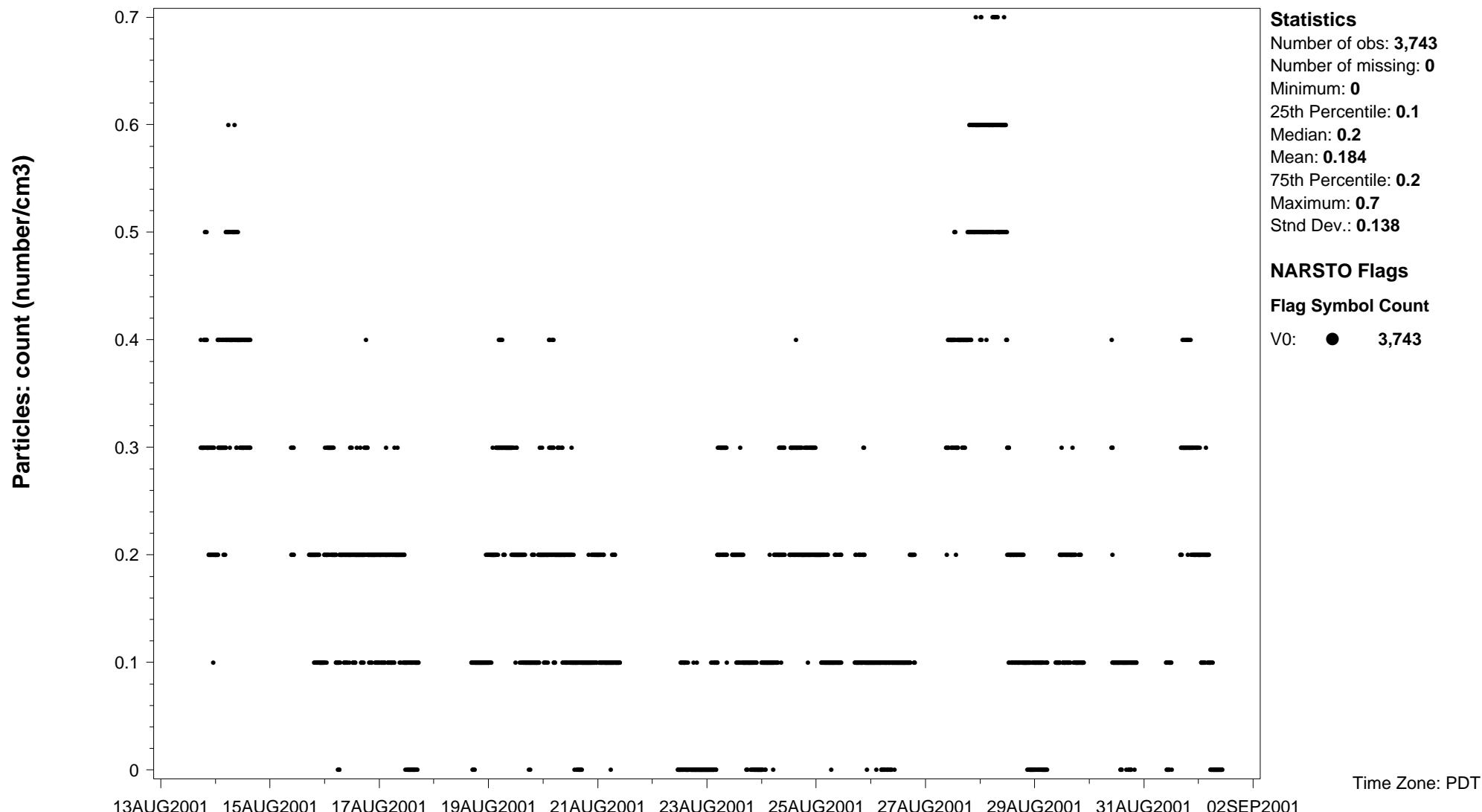


NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 10** Sampling interval: **5 minute**
 Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.725**
 Particle diameter--upper bound (UM): **0.9** Particle diameter--median (UM): **0.8125** Field sampling or measurement principle: **PCASP**
 Inlet type: **Open sampling line** Sampling humidity or temperature control: **Temperature controlled**
 Instrument name and model number: **Particle Measuring System PCASP-100X** Measurement principal investigator: **Richard Leitch**
 Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**



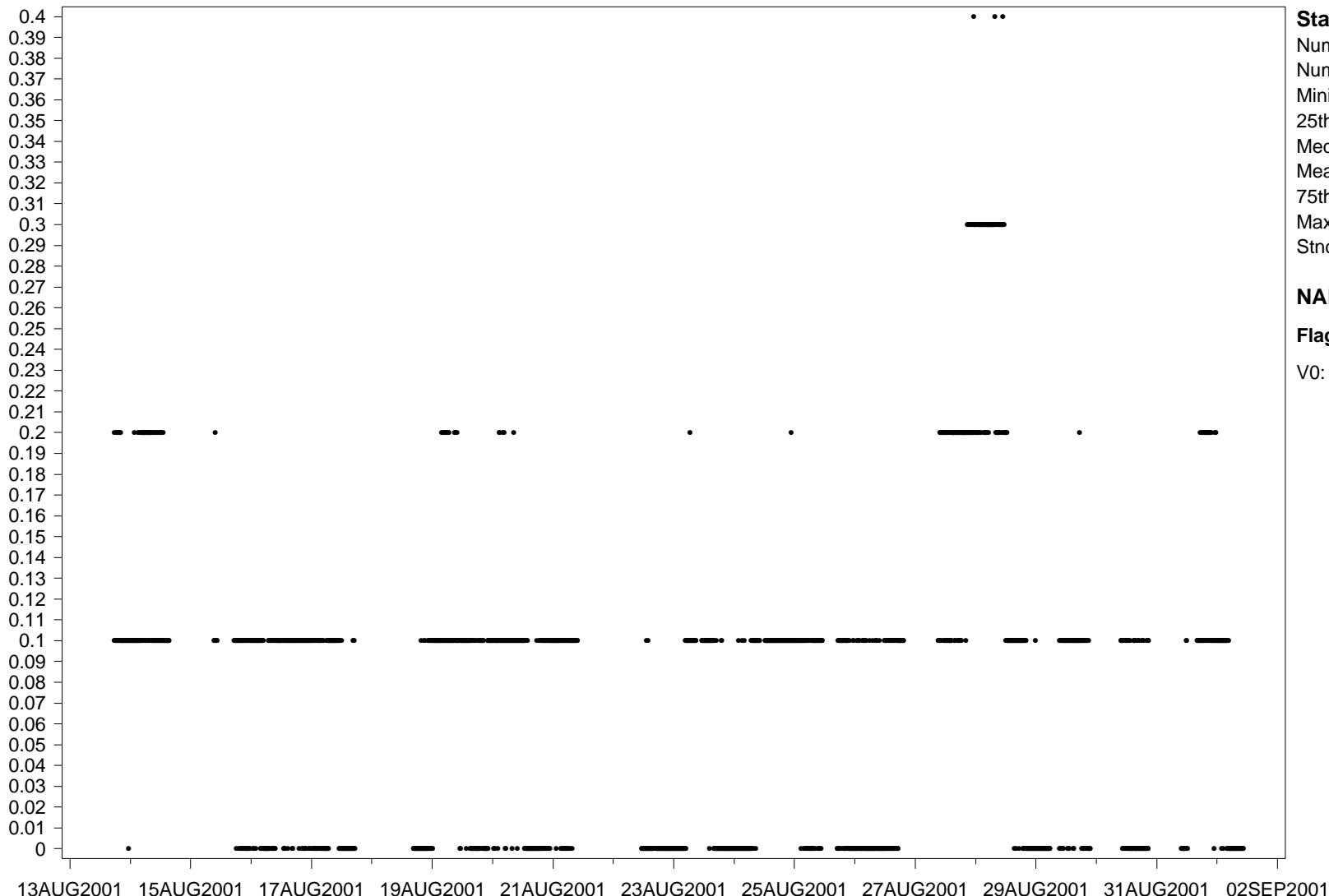
NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 11** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.9** Particle diameter--upper bound (UM): **1.2**
Particle diameter--median (UM): **1.05** Field sampling or measurement principle: **PCASP** Inlet type: **Open sampling line**
Sampling humidity or temperature control: **Temperature controlled** Instrument name and model number: **Particle Measuring System PCASP-100X**
Measurement principal investigator: **Richard Leitch** Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm3)

**Statistics**

Number of obs: **3,743**
Number of missing: **0**
Minimum: **0**
25th Percentile: **0**
Median: **0.1**
Mean: **0.076**
75th Percentile: **0.1**
Maximum: **0.4**
Stnd Dev.: **0.071**

NARSTO Flags

Flag Symbol Count
V0: ● **3,743**

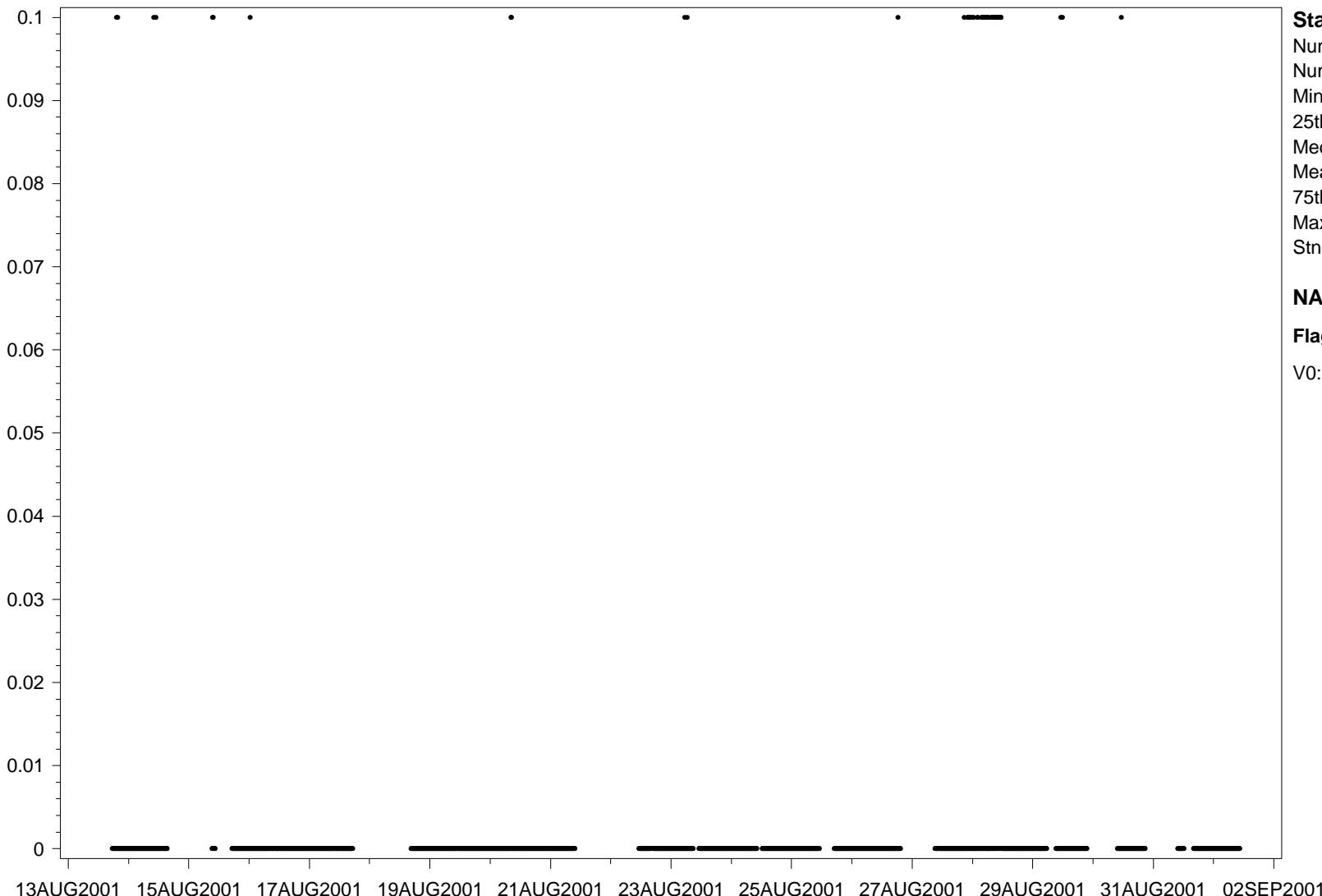
Time Zone: PDT

NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 12** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **1.2** Particle diameter--upper bound (UM): **1.5**
Particle diameter--median (UM): **1.35** Field sampling or measurement principle: **PCASP** Inlet type: **Open sampling line**
Sampling humidity or temperature control: **Temperature controlled** Instrument name and model number: **Particle Measuring System PCASP-100X**
Measurement principal investigator: **Richard Leitch** Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm³)**Statistics**

Number of obs: **3,743**
Number of missing: **0**
Minimum: **0**
25th Percentile: **0**
Median: **0**
Mean: **0.001**
75th Percentile: **0**
Maximum: **0.1**
Stnd Dev.: **0.012**

NARSTO Flags

Flag Symbol Count
V0: ● 3,743

Time Zone: PDT

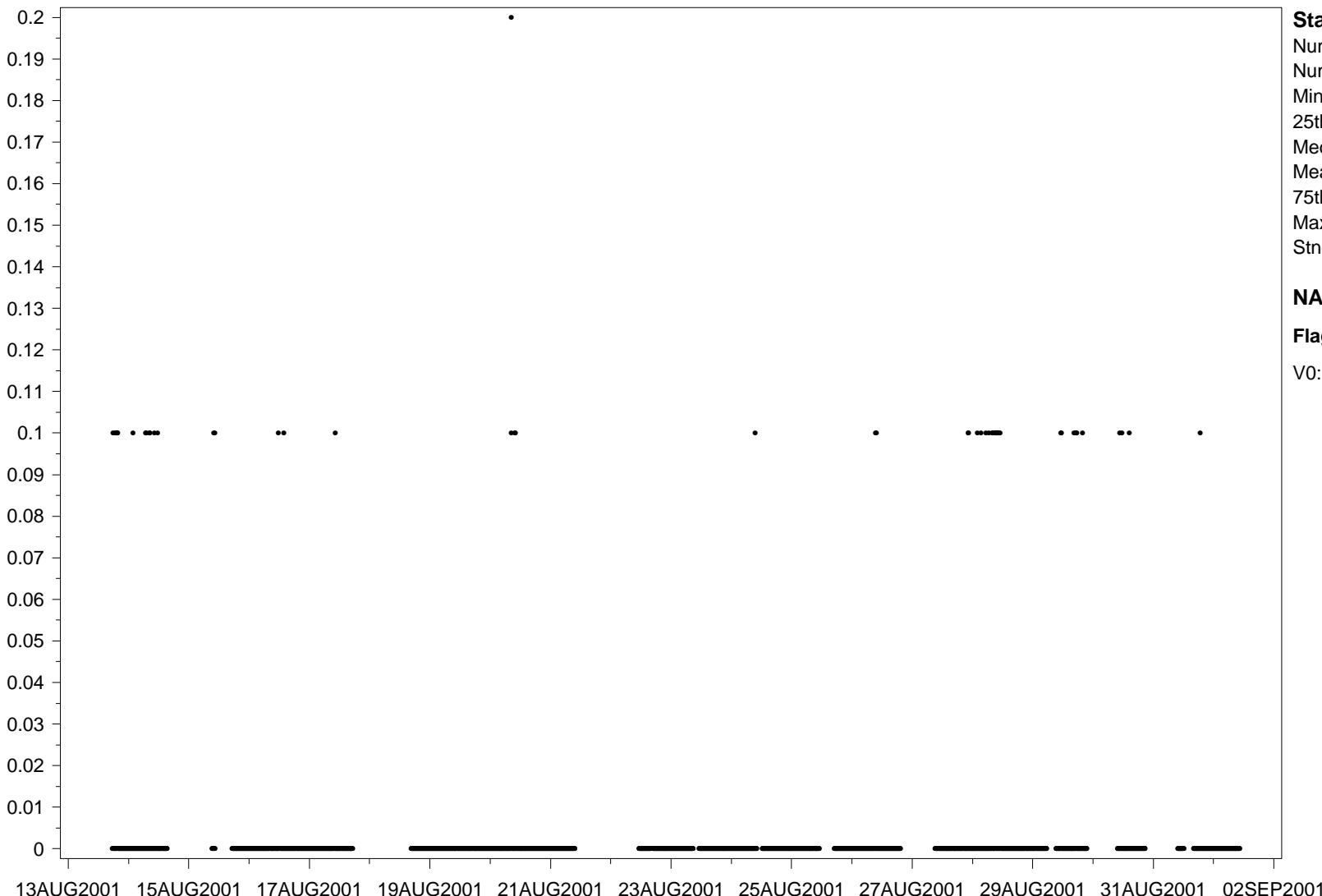
NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 13** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **1.5** Particle diameter--upper bound (UM): **2**
Particle diameter--median (UM): **1.75** Field sampling or measurement principle: **PCASP** Inlet type: **Open sampling line**
Sampling humidity or temperature control: **Temperature controlled** Instrument name and model number: **Particle Measuring System PCASP-100X**
Measurement principal investigator: **Richard Leitch** Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm3)

**Statistics**

Number of obs: **3,743**
Number of missing: **0**
Minimum: **0**
25th Percentile: **0**
Median: **0**
Mean: **0.001**
75th Percentile: **0**
Maximum: **0.2**
Stnd Dev.: **0.012**

NARSTO Flags

Flag Symbol Count
V0: ● **3,743**

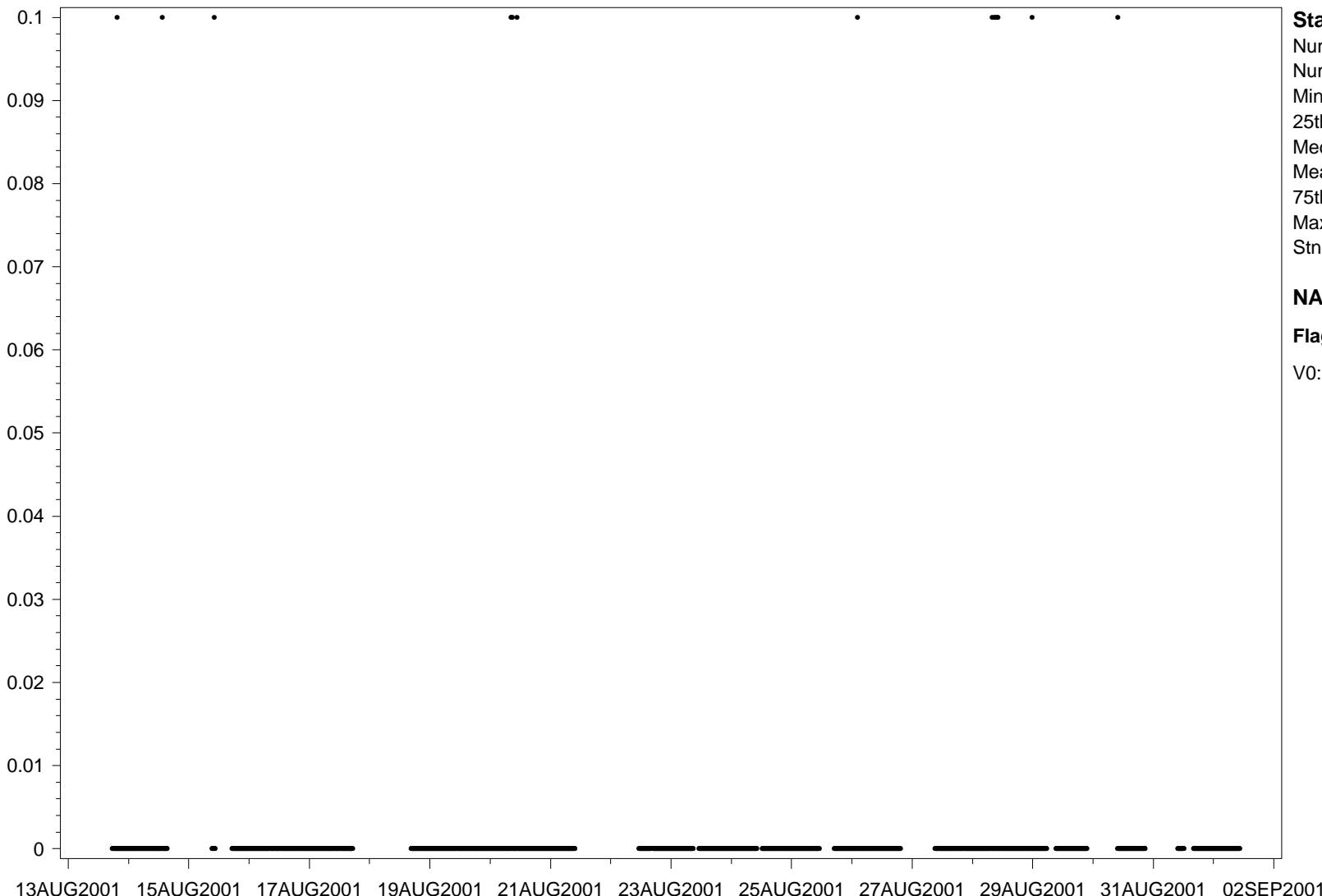
Time Zone: PDT

NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 14** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **2** Particle diameter--upper bound (UM): **2.5**
Particle diameter--median (UM): **2.25** Field sampling or measurement principle: **PCASP** Inlet type: **Open sampling line**
Sampling humidity or temperature control: **Temperature controlled** Instrument name and model number: **Particle Measuring System PCASP-100X**
Measurement principal investigator: **Richard Leitch** Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm³)**Statistics**

Number of obs: **3,743**
Number of missing: **0**
Minimum: **0**
25th Percentile: **0**
Median: **0**
Mean: **0.000**
75th Percentile: **0**
Maximum: **0.1**
Stnd Dev.: **0.006**

NARSTO Flags

Flag Symbol Count
V0: ● **3,743**

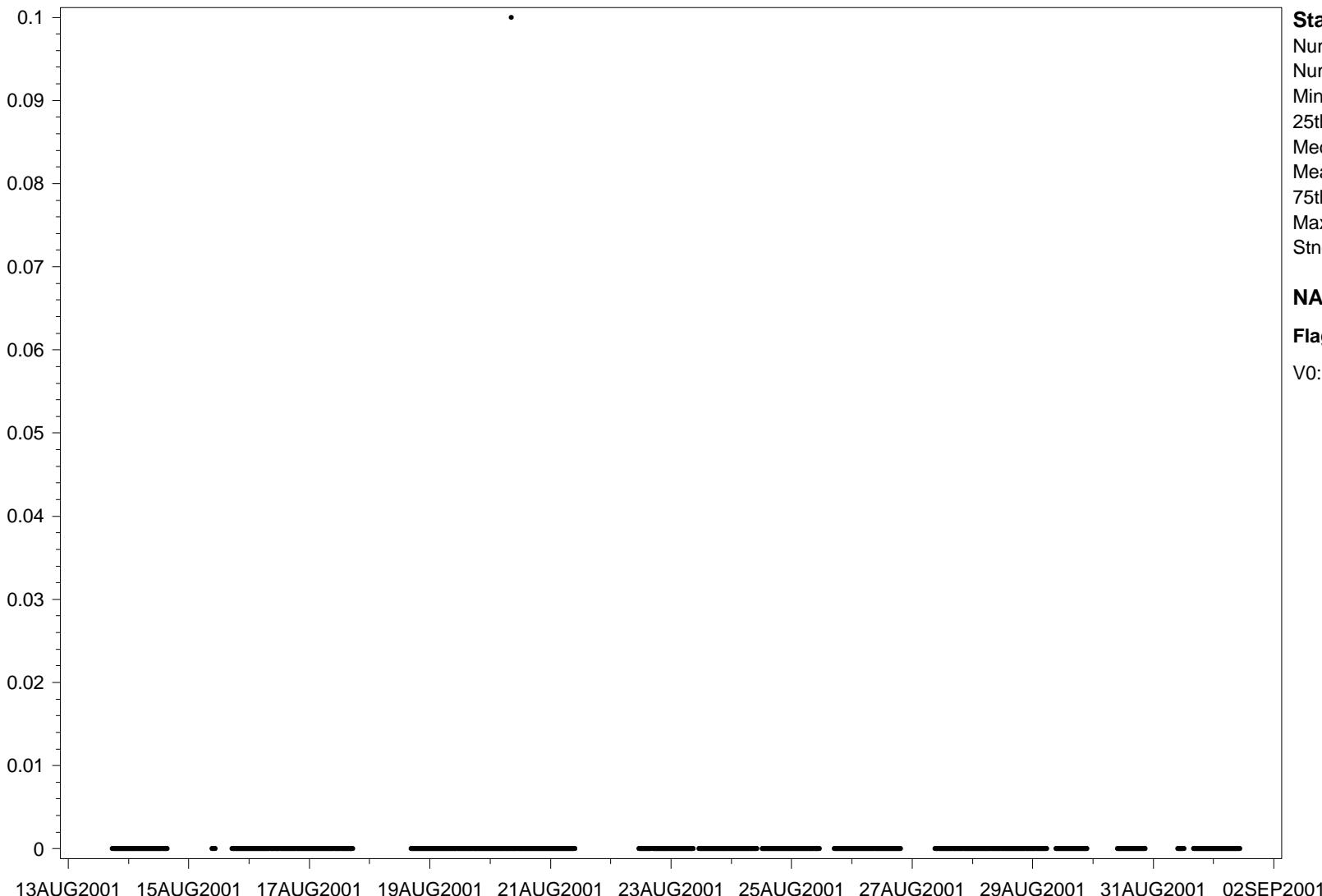
Time Zone: PDT

NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: count** Units: **number/cm3** Basis: **channel 15** Sampling interval: **5 minute**
Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **2.5** Particle diameter--upper bound (UM): **3**
Particle diameter--median (UM): **2.75** Field sampling or measurement principle: **PCASP** Inlet type: **Open sampling line**
Sampling humidity or temperature control: **Temperature controlled** Instrument name and model number: **Particle Measuring System PCASP-100X**
Measurement principal investigator: **Richard Leitch** Detection Limit: **Not available**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-13** End Date:**2001-09-01**

Particles: count (number/cm³)**Statistics**

Number of obs: **3,743**
Number of missing: **0**
Minimum: **0**
25th Percentile: **0**
Median: **0**
Mean: **0.000**
75th Percentile: **0**
Maximum: **0.1**
Stnd Dev.: **0.002**

NARSTO Flags**Flag Symbol Count**

V0: ● 3,743

Time Zone: PDT